Chapter Seven: Natural Resources and Conservation Element

HOLLISTER TODAY

Natural Habitats and Wildlife

Hollister is rich with diverse habitats, such as creeks and drainageways, that are valued resources for Hollister's wildlife. Protection, restoration or enhancement of damaged habitats is important for the continued health of Hollister's natural environment.

Protection of the creeks and drainageways and wetlands, and the plants and animals that live in and near them, can be achieved by managing public access along these areas and by minimizing encroachment by new development to only that which is unavoidable. This can be accomplished by preserving buffer areas along creeks and drainageways, associated riparian areas and wetlands. Another way to protect creeks is to improve public access points so that uncontrolled foot traffic does not damage these sensitive habitats.

Vegetation, fish, and wildlife habitat are essential to the community of Hollister. As development pressures grow, the need for preservation of the valuable diversity of species becomes increasingly important. The City recognizes the ecological, scientific, aesthetic and cultural values of threatened and endangered species as well as their inherent and legal right to exist without undue disturbance. Protection of threatened and endangered species shall also extend to habitat that might reasonably be expected to support populations of those species, consistent with the requirements of state and federal law. By providing protection to special status species, the City is recognizing the need to contribute to

the protection of native plants and animals, and their habitats, before their populations are so low that they must be listed as threatened or endangered under the state and federal endangered species acts.

The San Joaquin kit fox (Vulpes macrotis mutica) is listed as a federally endangered and state threatened species, and has been identified in the Natural Diversity Database (prepared by the California Department of Fish and Game) as the only species endangered, threatened or of special concern which may be found within the Hollister Planning Area. The nearest sighting of a San Joaquin kit fox in relation to the Hollister Planning Area occurred in 1972, when one was seen approximately 3,000 feet east of the southeast corner of the Planning Area. However, the San Joaquin kit fox is known to range within two miles of sightings, and San Benito County has designated the area east of Fairview Road as a potential San Joaquin kit fox habitat area.

Wetlands

Wetlands are defined as: "Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas." Wetlands are fragile, natural resources subject to flooding, erosion, soil-bearing capacity limitations and other hazards. In addition they are resources of special significance due to the modulation of flood waters, water quality and habitat functions they perform, and resulting values identified by man such as control of flood velocities, floodwater storage, floodwater passage, aquifer recharge, erosion control, pollution control, wildlife habitat, education, scientific study, open space and recreation.

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Mineral Deposits

The State Mining and Geology Board has designated portions of the Hollister Planning Area as having construction aggregate deposits (sand, gravel and crushed rock) of regional significance (see Figure 7), pursuant to the Surface Mining and Reclamation Act (Public Resources Code Section 2710 et seq.). These resources remain potentially available near the San Benito River and are needed to meet future demands in the region. Land uses that require a high public or private investment in structures, land improvements, and landscaping and that would prevent mining (i.e., high density residential development, public facilities, intensive industrial and commercial uses) are inherently incompatible with mining. Those land uses that require a low public or private investment in structures, land improvements, and landscaping that would allow mining (i.e., extensive industrial, recreation, agricultural and open space uses) may be compatible with mining in these areas. Interim land uses that require structures, land improvements, and landscaping of a limited useful life may be able to accommodate mining at the end of that useful life.

Energy Conservation

Supplies of non-renewable energy resources, such as petroleum, natural gas and other fossil fuels, are finite and, therefore, considered scarce in the long term. Renewable energy resources, such as solar and geothermal energy, have been available for decades. With technological advances, increasing concerns about the potential for supply disruption and the rising costs of conventional resources, renewable energy resources are an attractive alternative for homes and businesses.

Energy conservation is viewed as an energy resource, since the efficient use of energy allows our energy supplies to be consumed at a slower rate. Energy conservation includes such measures as turning off lights and equipment when not needed, planting trees that shade buildings during the summer and using fuel-efficient vehicles. Reducing demand and reducing wasted energy can be accomplished through residential, commercial, and industrial programs designed to educate the consumer about options for energy conservation, and energy-efficient site and architectural design. Transportation-related measures that lead to energy conservation might include urban design and land use patterns that reduce trip lengths, thereby reducing fossil fuel consumption.

Title 24 Standards

The California Building Code establishes building energy efficiency standards for new construction (including requirements for entire new buildings, additions, alterations, and in nonresidential buildings, repairs). Since first established in 1977, the Building Energy Efficiency Standards (along with standards for energy efficiency in appliances) have helped Californians save more than \$11.3 billion in electricity and natural gas costs. The Standards are updated periodically to allow incorporation of new energy efficiency technologies and methods

LEED Leadership in Energy and Environmental Design

The LEED (Leadership in Energy and Environmental Design) Green Building Rating SystemTM is a voluntary, consensus-based national standard for developing high-performance, sustainable buildings. LEED provides a complete framework for assessing building performance and meeting sustainability goals. Based on well-founded scientific standards, LEED emphasizes state of the art strategies for sustainable site development, water savings, energy efficiency, materials selection and indoor environmental quality. LEED recognizes achievements and promotes expertise in green building through a comprehensive system offering project certification, professional accreditation and training.

Water Conservation

Reuse and conservation of water throughout the year helps to provide a reliable source and reduces the need and cost of securing out-of-area supplies. Examples of water conservation measures include aerators for faucets and showerheads, low-flow toilets, irrigation system timers and monitors, drought-tolerant landscaping, and water-efficient dishwashers and washing machines. Water also can be recycled: car washes, commercial laundries and air-conditioning towers are candidates for reuse (the major use of recycled water is landscaping with gray water).

KEY FINDINGS AND RECOMMENDATIONS

Continue to Protect Wildlife Habitat.

Additional development could put increased pressure on existing wildlife habitat areas. Development proposed within the County-designated kit fox habitat area boundaries will be assessed an impact fee for every home or acre developed, under the terms of a Habitat Conservation Agreement with the U.S. Fish and Wildlife Service. Developers must conduct pre-construction kit fox surveys within this area. Riparian habitat areas are commonly found within the 100-year floodplain. California Department of Fish and Game policy is to permit no net loss of riparian habitat, which means that those who propose to develop or otherwise modify a riparian habitat must, at a minimum, preserve or recreate a habitat area equal in area to the amount of riparian habitat which would be lost in implementing their plans.

Identify Ways to Reduce, Reuse, Recycle

Reducing, reusing and recycling resources saves raw materials. Reduction refers to use of less of a resource material, such as the purchase of products with minimal packaging; reuse of a product involves the reapplication of a used product additional times before disposal, such as

donating clothes to a charitable organization; recycling involves the reprocessing of the used product into the same or new product, such as reprocessing of used paper into newsprint.

Opportunities for Saving Energy

Conserving processes also save energy, since less energy is used than in the mining/harvesting, processing and transport of finished product. This is true of all resource types, from the commonly recycled items, such as glass, paper, aluminum, and tin, to fossil-fuel-based resources, such as plastics and automobile-related waste oils. Reduction of waste has been an issue in California due to the limited amount of land available for landfills. Residents, businesses and government should do all that is possible to reduce, reuse and recycle materials.

Utilize Mineral Deposits Appropriately

Increased development within the region is likely to create a growing demand for the regionally significant construction aggregate deposits which are located within the Hollister Planning Area.

NATURAL RESOURCES AND CONSERVATION ELEMENT GOALS AND POLICIES

The following matrix of policies and implementation measures is organized according to five major goals dealing with natural resources and conservation.

GOAL NRC1	Assure enhanced habitat for native plants and animals, and special protection for threatened or endangered species.
GOAL NRC2	Provide for clean air.
GOAL NRC3	Conserve and manage natural resources.

Assure enhanced habitat for native plants and animals, and special protection for threatened or endangered species.

	Policies	Lead Responsibility	Time Frame	Implementation Measures
NRC 1.1	Protection of Environmental Resources	Planning	On-going	Require project mitigation for habitat [NRC.V]
	Protect or enhance environmental resources, such as wetlands, creeks and drainageways, and habitat for threatened and endangered species.	Building	On-going	Require wetlands delineation [NRC.X]
NRC 1.2	Protection of Endangered Species Habitat	Planning	On-going	Require project mitigation for
	Identify and protect the habitats of endangered species which may found within the Hollister Planning Area, in cooperation with the U.S. Fish and Wildlife Service and the California Department of Fish and Game, through the review all development proposals for compliance with regulations established by the U.S. Fish and Wildlife Service and the California Department of Fish and Game as they apply to the protection of endangered species and their habitats.			habitat [NRC.V]
NRC 1.3	Compensatory Habitat, Habitat Enhancement or Habitat Protection	Planning	On-going	Require project mitigation for habitat [NRC.V]
	Require developers to assure the provision of compensatory habitat, habitat enhancement or habitat protection if impacts to sensitive species that could result from proposed development cannot be avoided.			

Assure enhanced habitat for native plants and animals, and special protection for threatened or endangered species.

	Policies	Lead Responsibility	Time Frame	Implementation Measures
NRC 1.4	Other Habitat Planning Measures Utilize regional planning and the use of concepts such as mitigation banking to offset the cumulative effects of piecemeal development on the habitat of special status species.	Planning	2 years	Explore regional planning opportunities to preserve habitats [NRC.B]
NRC 1.5	Wetlands Preservation	Building	On-going	Require wetlands delineation
	Maintain existing riparian areas in their natural state to provide for wildlife habitat, groundwater percolation, water quality, aesthetic relief and recreational uses that are environmentally compatible with wetland preservation. Require appropriate public and private wetlands preservation, restoration and/or rehabilitation through compensatory mitigation in the development process for unavoidable impacts. Support and promote acquisition from willing property owners, and require those development projects, which may result in the disturbance of delineated seasonal wetlands to be redesigned to avoid such disturbance.	Planning	On-going	[NRC.X] Require wetlands replacement plans [NRC.Y]

Assure enhanced habitat for native plants and animals, and special protection for threatened or endangered species.

	Policies	Lead Responsibility	Time Frame	Implementation Measures
NRC 1.6	Enhancement of Creeks and Drainageways	Building	On-going	Require wetlands delineation [NRC.X]
	Explore enhancement of, and support continuous upgrades to, drainageways to serve as wildlife habitat corridors for wildlife movement and to serve as flood control facilities to accommodate storm drainage and groundwater recharge. Require setbacks, creek enhancement and associated riparian habitat restoration/creation for projects adjacent to creeks to maintain storm flows, reduce erosion and maintenance and improve habitat values, where feasible. Generally, all new structures and paved surfaces should be set back 100 feet from wetlands and creeks.	Planning	On-going	Require wetlands replacement plans [NRC.Y]
NRC 1.7	Specialized Surveys for Special Status Species	Planning	3 years	Establish and update the list of
	Require specialized surveys for special status species for those projects that have been proposed in areas that contain suitable habitat for such species. All surveys should take place during appropriate seasons to determine nesting or breeding occurrences.	Building	On-going	species [NRC.F] Require preconstruction surveys for nesting raptors [NRC.U]
		Building	On-going	Conduct surveys for burrowing owls [NRC.K]
		Planning	3 years	Establish mitigation for the burrowing owl colony in the Fairview Road/Santa Ana Road area [NRC.G]

Provide for clean air.

	Policies	Lead Responsibility	Time Frame	Implementation Measures
NRC 2.1	State and Federal Standards for Air Quality Continue to comply and strive to exceed state and federal standards for air quality. Review all development proposals for consistency with the current Air Quality Management Plan of the Monterey Bay Unified Air Pollution Control District.	Planning	On-going	Apply standards to sensitive air quality receptors [NRC.I]
NRC 2.2	Air Quality Considerations in Land Use Planning To ensure excellent air quality, promote land use compatibility for new development by using buffering techniques such as landscaping, setbacks, and screening in areas where different land uses abut one another.	Planning Planning Building	3 years On-going On-going	Apply air quality standards in development review [NRC.H] Require appropriate landscaping to mitigate air quality impacts [NRC.R] Establish buffers to protect air quality [NRC.M]
NRC 2.3	Air Quality Planning and Coordination Integrate air quality considerations with the land use and transportation processes by mitigating air quality impacts through land use design measures, such as encouraging project design that will foster walking and biking.	Planning	On-going	Coordinate with other agencies in air quality planning [NRC.L]

Provide for clean air.

	Policies	Lead Responsibility	Time Frame	Implementation Measures
NRC 2.4	Particulate Matter Pollution Reduction Promote the reduction of particulate matter pollution from roads, parking lots,	Building	On-going	Require construction techniques that minimize wind erosion [NRC.T]
	construction sites, agricultural lands and other activities. This would include: (1) requiring the watering of exposed earth surfaces during excavation, grading and construction activities; (2) requiring the daily (or as needed based upon actual circumstances) cleanup of mud and dust carried onto street surfaces by construction vehicles; and (3) requiring that appropriate measures to be taken to reduce wind erosion during construction, such as watering of soil, replanting and repaving.	Building	On-going	Establish buffers to protect air quality [NRC.M]
NRC 2.5	Circulation Alternatives to Reduce Impacts on Air Quality	Engineering	2 years	Conduct air quality education programs [NRC.A]
	Promote circulation alternatives that reduce air pollution.	Planning	On-going	Identify opportunities for transit-oriented development [NRC.N]

Conserve and manage natural resources.

	Policies	Lead Responsibility	Time Frame	Implementation Measures
NRC 3.1	Development Practices to Conserve Resources	Building	On-going	Publicize energy conservation
	Promote development practices, which will result in the conservation of energy, water, minerals and other	Building	On-going	programs [NRC.Q] Apply Title 24 requirements [NRC.J]
	natural resources, and promote the use of renewable energy technologies (such as solar and wind) when possible.	Planning	On-going	Implement the LEED program [NRC.O]
NRC 3.2	Resource-Efficient Organizations and Businesses	City Council	3 years	Encourage "green" building standards and processes
	Encourage businesses, commercial property owners, apartment building owners and non-profit organizations to be resource, energy and water efficient.			[NRC.E]
NRC 3.3	Resource Efficiency in Site Development	Building	On-going	Require building and site design
	Encourage site planning and development practices that reduce energy demand, support transportation alternatives and incorporate resource- and			review for energy conservation [NRC.S]
		Building	On-going	Promote solar design [NRC.P]
	energy-efficient infrastructure.	Planning	2 years	Identify opportunities for PG&E assistance [NRC.C]

Conserve and manage natural resources.

	Policies	Lead Responsibility	Time Frame	Implementation Measures
NRC 3.4	Resource-Efficient Building Design Promote and encourage	City Council	3 years	Encourage "green" building standards and processes [NRC.E]
	residences to be resource, energy and water efficient by creating incentives and removing obstacles to promote their use. Require those proposing new development to	Building	On-going	Require building and site design review for energy conservation [NRC.S]
	incorporate energy conservation measures in the design and construction of all proposed residential, commercial, industrial and public buildings. This would include: 1. High-efficiency heating-ventilation-air conditioning (HVAC) systems for maximum energy efficiency; 2. Design window systems to reduce thermal gain during warm weather and heat loss during cool weather; and, 3. Install high-efficiency sodium lamps for all street and parking lot lighting.	Planning	On-going	Require project review for energy conservation measures [NRC.W]
NRC 3.5	Efficiency in Government Promote and serve as an effective leader in implementing conservation practices and incorporating resource-efficient alternatives in government facilities and services.	Engineering	2 years	Provide for backup energy provision [NRC.D]

Conserve and manage natural resources.

	Policies	Lead Responsibility	Time Frame	Implementation Measures
NRC 3.6	Energy-Efficient Transportation Programs Encourage the creation of programs such as Transportation Systems Management (TSM), public transit, carpools/vanpools, ride-match, bicycling, and other alternatives to the energy-inefficient use of vehicles.	Building	On-going	Publicize energy conservation programs [NRC.Q]

IMPLEMENTATION MEASURES

2-Year Time Frame

NRC.A Conduct air quality education programs

Support and participate in air quality education programs.

NRC.B Explore regional planning opportunities to preserve habitats

Explore opportunities for regional planning and the use of concepts such as mitigation banking to offset the cumulative effects of piecemeal development on the habitat of special status species.

NRC.C Identify opportunities for PG&E assistance

Obtain the assistance of the Pacific Gas and Electric Company in reviewing proposals for commercial buildings and major subdivisions of more than 25 units during the design and approval process to assure the incorporation of energy efficiency recommendations into the plans.

NRC.D Provide for backup energy provision

Evaluate backup energy provisions for critical city facilities and upgrade as needed. Encourage the use of alternatives, such as fuel cell and solar generator backups, to the sustained use of gasoline-powered generators.

3-Year Time Frame

NRC.E Encourage "green" building standards and processes

Adopt a "Green Building Program" to encourage the use of green building materials and energy conservation. Provide a resource list of local suppliers and builders that promote green building materials and practices. Adopt green architecture standards that can be used in the rating system for approving development under the City's growth management program.

NRC.F Establish and update the list of species

Maintain a current list of threatened and endangered and special status species.

NRC.G Establish mitigation for the burrowing owl colony in the Fairview Road/Santa Ana Road area

Require project applicants in the Fairview Road/Santa Ana Road area to develop and implement a mitigation plan to avoid or otherwise compensate for any disturbance to the burrowing owl colony in that area. This plan should be developed in coordination with the California Department of Fish and Game.

On-going Time Frame

NRC.H Apply air quality standards in development review

Through development review, require developers to implement strategies for air quality improvement. Ensure that any proposed new sources of particulate matter use latest control technology (such as enclosures, paving unpaved areas, parking lot sweeping and landscaping) and provide adequate buffer setbacks to protect existing or future sensitive receptors.

NRC.I Apply standards to sensitive air quality receptors

Through development review, ensure that siting of any new sensitive receptors provides for adequate buffers from existing sources of toxic air contaminants or odors.

NRC.J Apply Title 24 requirements

Meet or exceed Title 24 energy conservation requirements, and, where possible, require structural and landscaping design to make use of natural heating and cooling. Encourage the use of solar and alternative energy technologies to meet or exceed Title 24 requirements.

NRC.K Conduct surveys for burrowing owls

Require project applicants with proposed projects on grazing or fallow agricultural land to conduct a spring survey for the presence of burrowing owls.

NRC.L Coordinate with other agencies in air quality planning

Cooperate with the Monterey Bay Unified Air Pollution Control District and other agencies in their efforts to ensure compliance with existing air quality regulations.

NRC.M Establish buffers to protect air quality

Through development review, ensure that any proposed new sources of toxic air contaminants or odors provide adequate buffers to protect sensitive receptors and comply with existing health standards.

NRC.N Identify opportunities for transit-oriented deveo

Assist in educating developers and the public on the benefits of pedestrian and transitoriented development.

NRC.O Implement the LEED program

Encourage developers to use "Leadership in Energy and Environmental Design" Standards.

NRC.P Promote solar design

Promote the use of solar energy and develop design standards relating to solar orientation, including landscaping, and appropriate impervious surfaces.

NRC.Q Publicize energy conservation programs

Provide public information on alternative energy technologies for residential developers, contractors and property owners. Publicize energy conservation programs and weatherization services that are available to provide subsidized or at cost inspection and corrective action by making information available through websites and newsletters.

NRC.R Require appropriate landscaping to mitigate air quality impacts

Continue to implement Zoning Guideline for landscaping in order to absorb pollutants.

NRC.S Require building and site design review for energy conservation

Evaluate as part of development review, proposed site and building design for energy-efficiency, such as: (1) shading of parking lots and summertime shading of south-facing windows; (2) requiring those proposing new development to design all proposed commercial, office and industrial structures with high-efficiency heating-ventilation-air conditioning (HVAC) systems for maximum energy efficiency; (3) requiring those proposing new development to design all window systems to reduce thermal gain during warm weather and heat loss during cool weather; (4) requiring those proposing new development to install high-efficiency sodium lamps for all street and parking lot lighting; and (5) encouraging the use of domestic solar energy.

NRC.T Require construction techniques that minimize wind erosion

Require appropriate measures to be taken to reduce wind erosion during construction, such as watering of soil, replanting and repaving, and cleanup of mud and dust carried onto street surfaces by construction vehicles.

NRC.U Require pre-construction surveys for nesting raptors

Require preconstruction surveys for nesting raptors, to be conducted by a qualified ornithologist, for those projects that would affect on-site oaks or orchards, or which would involve construction during the nesting season (March to July). Hollister shall allow no construction activities that would result in the disturbance of an active raptor nest (including tree removal) to proceed until after it has been determined by a qualified ornithologist that the nest has been abandoned.

NRC.V Require project mitigation for habitat

Continue the City's practice of requiring mitigation for projects that would affect wetlands, in conjunction with recommendations of State and Federal agencies.

NRC.W Require project review for energy conservation measures

Review all development proposals for energy efficiency and features, and conservation of water resources. Review impacts on mineral resources and other natural resources prior to the issuance of any building permit.

NRC.X Require wetlands delineation

Require a delineation of jurisdictional waters by a qualified biologist at the outset of the project planning stage of any proposed development that contains or is immediately adjacent to wetlands. This delineation shall be verified and approved by the U.S. Army Corps of Engineers.

NRC.Y Require wetlands replacement plans

Require those development projects that involve the unavoidable loss of riparian areas to replace any such loss onsite or in immediately adjacent off-site areas along the river/stream corridor, and require project sponsors to develop re-vegetation plans which offset losses of biotic values, in coordination with the California Department of Fish and Game and the U.S. Army Corps of Engineers.